

### Abstract of the Disclosure

A robot arm positioning error is corrected by employing a specimen gripping end effector in which a light source and a light receiver form a light transmission pathway that senses proximity to the specimen. A robot arm old position is sensed and recorded. The robot arm retrieves the specimen from the old position and employs old position information to replace the specimen at a new position that is ideally the same as the old position. A robot arm new position is sensed and recorded. A difference between the new and old positions represents a position error. A correct position is obtained by processing the position error and the old position information.